selecting the implementation of strategies that provide the most efficient and effective use of existing and future transportation facilities.

(c) In addition to the requirements provided in §971.204, the CMS must meet the following requirements:

(1) For those FH transportation systems that require a CMS, in both metropolitan and non-metropolitan areas, consideration shall be given to strategies that reduce private automobile travel and improve existing transportation efficiency. Approaches may include the use of alternative mode studies and implementation plans as components of the CMS.

(2) A CMS will:

(i) Identify and document measures for congestion (e.g., level of service);

(ii) Identify the causes of congestion;

(iii) Include processes for evaluating the cost and effectiveness of alternative strategies to manage congestion;

(iv) Identify the anticipated benefits of appropriate alternative traditional and nontraditional congestion management strategies;

(v) Determine methods to monitor and evaluate the performance of the multi-modal transportation system; and

(vi) Appropriately consider the following example categories of strategies, or combinations of strategies for each area:

(A) Transportation demand management measures;

(B) Traffic operational improvements;

(C) Public transportation improvements;

(D) ITS technologies; and

(E) Additional system capacity.

PART 972—FISH AND WILDLIFE SERVICE MANAGEMENT SYSTEMS

Subpart A—Definitions

Sec.

Subpart B—Fish and Wildlife Service Management Systems

AUTHORITY: 23 U.S.C. 204, 315; 42 U.S.C. 7410 *et seq.*; 49 CFR 1.48.

SOURCE: 69 FR 9487, Feb. 27, 2004, unless otherwise noted.

Subpart A—Definitions

§ 972.100 Purpose.

The purpose of this subpart is to provide definitions for terms used in this part.

§ 972.102 Applicability.

The definitions in this subpart are applicable to this part, except as otherwise provided.

§ 972.104 Definitions.

Alternative transportation systems means modes of transportation other than private vehicles, including methods to improve system performance such as transportation demand management, congestion management, and intelligent transportation systems. These mechanisms help reduce the use of private vehicles and thus improve overall efficiency of transportation systems and facilities.

Elements mean the components of a bridge important from a structural, user, or cost standpoint. Examples are decks, joints, bearings, girders, abutments, and piers.

Federal lands bridge management system (BMS) means a systematic process used by the Forest Service (FS), the Fish and Wildlife Service (FWS) and the National Park Service (NPS) for analyzing bridge data to make forecasts and recommendations, and provides the means by which bridge maintenance, rehabilitation, and replacement programs and policies may be effectively considered.

Federal lands congestion management system (CMS) means a systematic process used by the FS, FWS and NPS for

managing congestion that provides information on transportation system performance and alternative strategies for alleviating congestion and enhancing the mobility of persons and goods to levels that meet Federal, State and local needs.

Federal Lands Highway Program (FLHP) means a federally funded program established in 23 U.S.C. 204 to address transportation needs of Federal and Indian lands.

Federal lands pavement management system (PMS) means a systematic process used by the FS, FWS and NPS that provides information for use in implementing cost-effective pavement reconstruction, rehabilitation, and preventive maintenance programs and policies and that results in pavement designed to accommodate current and forecasted traffic in a safe, durable, and cost-effective manner.

Federal lands safety management system (SMS) means a systematic process used by the FS, FWS and NPS with the goal of reducing the number and severity of traffic accidents by ensuring that all opportunities to improve roadway safety are identified, considered, implemented and evaluated as appropriate, during all phases of highway planning, design, construction, operation and maintenance, by providing information for selecting and implementing effective highway safety strategies and projects.

Fish and Wildlife Service transportation plan means the official Fish and Wildlife Service-wide multimodal transportation plan that is developed through the Fish and Wildlife Service transportation planning process pursuant to 23 U.S.C. 204.

Highway safety means the reduction of traffic accidents, and deaths, injuries, and property damage resulting therefrom, on public roads.

Intelligent transportation system (ITS) means electronics, communications, or information processing used singly or in combination to improve the efficiency and safety of a surface transportation system.

Life-cycle cost analysis means an evaluation of costs incurred over the life of a project allowing a comparative analysis between or among various alternatives. Life-cycle cost analysis promotes consideration of total cost, to include maintenance and operation expenditures. Comprehensive life-cycle costs analysis includes all economic variables essential to the evaluation: User costs such as delay and safety costs associated with maintenance and rehabilitation projects, agency capital cost, and life-cycle maintenance costs.

Metropolitan planning area means the geographic area in which the metropolitan transportation planning process required by 23 U.S.C. 134 and 49 U.S.C. 5303–5306 must be carried out.

Metropolitan planning organization (MPO) means the forum for cooperative transportation decision-making for the metropolitan planning area pursuant to 23 U.S.C. 134 and 49 U.S.C. 5303.

National Wildlife Refuge System (Refuge System) means all the lands and waters reported by the FWS as being part of the National Wildlife Refuge System in the annual ''Report of Lands Under Control of the U.S. FWS.''[1] Included in the Refuge System are those lands that are generally known as refuges, waterfowl production areas, wetland management districts, and coordination areas.

Operations means those activities associated with managing, controlling, and regulating highway traffic.

Refuge road means a public road that provides access to or is located within a unit of the National Wildlife Refuge System and for which title and maintenance responsibilities are vested in the United States Government.

Refuge Roads Program means the funds allocated each fiscal year, as described in 23 U.S.C. 202(e) and 23 U.S.C. 204(k).

Refuge Roads transportation improvement program (RRTIP) means a staged, multiyear, multimodal program of transportation projects for the Refuge Roads Program consistent with the Fish and Wildlife Service transportation plan and planning processes pursuant to 23 U.S.C. 204(a) and (k).

Secretary means the Secretary of Transportation.

[1] ''Report of Lands under Control of the U.S. FWS,'' U.S. FWS, (published annually on September 30). A free copy is available from the U.S. FWS, Division of Realty, 4401 N. Fairfax Drive, Suite 622, Arlington, VA 22203; telephone: (703) 358–1713.

State means any one of the fifty States, the District of Columbia, or Puerto Rico.

Transportation facilities means roads, streets, bridges, parking areas, transit vehicles, and other related transportation infrastructure.

Transportation Management Area (TMA) means an urbanized area with a population over 200,000 (as determined by the latest decennial census) or other area when TMA designation is requested by the Governor and the MPO (or affected local officials), and officially designated by the Administrators of the Federal Highway Administration and the Federal Transit Administration. The TMA designation applies to the entire metropolitan planning area(s).

Subpart B—Fish and Wildlife Service Management Systems

§ 972.200 Purpose.

The purpose of this subpart is to implement 23 U.S.C. 204 which requires the Secretary and the Secretary of each appropriate Federal land management agency, to the extent appropriate, to develop by rule safety, bridge, pavement, and congestion management systems for roads funded under the FLHP.

§ 972.202 Applicability.

The provisions in this subpart are applicable to the Fish and Wildlife Service (FWS) and the Federal Highway Administration (FHWA) that are responsible for satisfying these requirements for management systems pursuant to 23 U.S.C. 204.

§ 972.204 Management systems requirements.

(a) The FWS shall develop, establish and implement the management systems as described in this subpart. The FWS may tailor the management systems to meet the FWS goals, policies, and needs using professional engineering and planning judgment to determine the required nature and extent of systems coverage consistent with the intent and requirements of this rule.

(b) The FWS and the FHWA shall develop an implementation plan for each of the management systems. These plans will include, but are not limited to, the following: Overall goals and policies concerning the management systems, each agency's responsibilities for developing and implementing the management systems, implementation schedule, data sources, and cost estimate. The FHWA will provide the FWS ongoing technical engineering support for the development, implementation, and maintenance of the management systems.

(c) The FWS shall develop and implement procedures for the development, establishment, implementation and operation of management systems. The procedures shall include:

(1) A process for ensuring the results of any of the management systems are considered in the development of FWS transportation plans and transportation improvement programs and in making project selection decisions under 23 U.S.C. 204;

(2) A process for the analyses and coordination of all management system outputs to systematically operate, maintain, and upgrade existing transportation assets cost-effectively;

(3) A description of each management system;

(4) A process to operate and maintain the management systems and their associated databases; and

(5) A process for data collection, processing, analysis and updating for each management system.

(d) All management systems will use databases with a geographical reference system that can be used to geolocate all database information.

(e) Existing data sources may be used by the FWS to the maximum extent possible to meet the management system requirements.

(f) The FWS shall develop an appropriate means to evaluate the effectiveness of the management systems in enhancing transportation decision-making and improving the overall efficiency of the affected federally owned transportation systems and facilities. This evaluation is to be conducted periodically, preferably as part of the comprehensive resource conservation planning process.

(g) The management systems shall be operated so investment decisions based

on management system outputs can be accomplished at the regional level.

§ 972.206 Funds for establishment, development, and implementation of the systems.

The Refuge Roads program funds may be used for development, establishment, and implementation of the management systems. These funds are to be administered in accordance with the procedures and requirements applicable to the funds.

§ 972.208 Federal lands pavement management system (PMS).

In addition to the requirements provided in §972.204, the PMS must meet the following requirements:

(a) The FWS shall, at a minimum, have PMS coverage of all paved refuge roads and other associated facilities, as appropriate, funded under the FLHP.

(b) The PMS may be based on the concepts described in the AASHTO's ''Pavement Management Guide.''[2]

(c) The PMS may be utilized at various levels of technical complexity depending on the nature of the pavement network. These different levels may depend on mileages, functional classes, volumes, loadings, usage, surface type, or other criteria the FWS deems appropriate.

(d) The PMS shall be designed to fit the FWS goals, policies, criteria, and needs using the following components, at a minimum, as a basic framework for a PMS:

(1) A database and an ongoing program for the collection and maintenance of the inventory, inspection, cost, and supplemental data needed to support the PMS. The minimum PMS database shall include:

(i) An inventory of the physical pavement features including the number of lanes, length, width, surface type, functional classification, and shoulder information;

(ii) A history of project dates and types of construction, reconstruction, rehabilitation, and preventive maintenance. If some of the inventory or historic data are difficult to establish, it may be collected when preservation or reconstruction work is performed;

(iii) A condition survey that includes ride, distress, rutting, and surface friction (as appropriate);

(iv) Traffic information including volumes and vehicle classification (as appropriate); and

(v) Data for estimating the costs of actions.

(2) A system for applying network level analytical procedures that are capable of analyzing data for all FWS managed transportation facilities in the inventory or any subset. The minimum analyses shall include:

(i) A pavement condition analysis that includes ride, distress, rutting, and surface friction (as appropriate);

(ii) A pavement performance analysis that includes present and predicted performance and an estimate of the remaining service life (performance and remaining service life to be developed with time); and

(iii) An investment analysis that:

(A) Identifies alternative strategies to improve pavement conditions;

(B) Estimates costs of any pavement improvement strategy;

(C) Determines maintenance, repair, and rehabilitation strategies for pavements using life-cycle cost analysis or a comparable procedure;

(D) Provides short and long term budget forecasting; and

(E) Recommends optimal allocation of limited funds by developing a prioritized list of candidate projects over a predefined planning horizon (both short and long term).

(e) For any FWS managed transportation facilities in the inventory or subset thereof, PMS reporting requirements shall include, but are not limited to, percentage of roads in good, fair, and poor condition.

§ 972.210 Federal lands bridge management system (BMS).

In addition to the requirements provided in §972.204, the BMS must meet the following requirements:

[2] ''Pavement Management Guide,'' AASHTO, 2001, is available for inspection as prescribed at 49 CFR part 7. It is also available from the American Association of State Highway and Transportation Officials (AASHTO), Publication Order Dept., P.O. Box 96716, Washington, DC 20090–6716 or online at *http://www.transportation.org/publications/bookstore.nsf.*

(a) The FWS shall have a BMS for bridges which are under the FWS jurisdiction, funded under the FLHP, and required to be inventoried and inspected under 23 CFR 650, subpart C, National Bridge Inspection Standards (NBIS).

(b) The BMS shall be designed to fit the FWS goals, policies, criteria, and needs using the following components, as a minimum, as a basic framework for a BMS:

(1) A database and an ongoing program for the collection and maintenance of the inventory, inspection, cost, and supplemental data needed to support the BMS. The minimum BMS database shall include:

(i) The inventory data required by the NBIS (23 CFR 650, subpart C);

(ii) Data characterizing the severity and extent of deterioration of bridge elements;

(iii) Data for estimating the cost of improvement actions;

(iv) Traffic information including volumes and vehicle classification (as appropriate); and

(v) A history of conditions and actions taken on each bridge, excluding minor or incidental maintenance.

(2) Analytical procedures that are capable of analyzing data for all bridges in the inventory or any subset. These procedures include, as appropriate, such factors as bridge condition, recommended repairs/replacement and estimated costs, prediction of the estimated remaining life of the bridge, development of a prioritized list of candidate projects over a specified planning horizon, and budget forecasting.

(c) For any bridge in the inventory or subset thereof, BMS reporting requirements shall include, but are not limited to, percentage of non-deficient bridges.

§972.212 Federal lands safety management system (SMS).

In addition to the requirements provided in §972.204, the SMS must meet the following requirements:

(a) The FWS shall have an SMS for all transportation facilities serving the Refuge System, as appropriate, funded under the FLHP.

(b) The FWS SMS may be based on the guidance in ''Safety Management Systems: Good Practices for Development and Implementation.''[3]

(c) The FWS shall utilize the SMS to ensure that safety is considered and implemented as appropriate in all phases of transportation system planning, design, construction, maintenance, and operations.

(d) The SMS may be utilized at various levels of complexity depending on the nature of the transportation facility involved.

(e) The SMS shall be designed to fit the FWS goals, policies, criteria, and needs using, as a minimum, the following components as a basic framework for a SMS:

(1) An ongoing program for the collection, maintenance and reporting of a database that includes:

(i) Accident records with sufficient detail for analysis such as accident type using standard reporting descriptions (e.g., right-angle, rear-end, head-on, pedestrian-related, etc.), location, description of event, severity, weather and cause;

(ii) An inventory of safety appurtenances such as signs, delineators, and guardrails (including terminals);

(iii) Traffic information including volumes and vehicle classification (as appropriate); and

(iv) Accident rates by customary criteria such as location, roadway classification, and vehicle miles of travel.

(2) Development, establishment and implementation of procedures for:

(i) Routinely maintaining and upgrading safety appurtenances including highway-rail crossing warning devices, signs, highway elements, and operational features where appropriate; and

(ii) Identifying and investigating hazardous or potentially hazardous transportation system safety problems, roadway locations and features, then establishing countermeasures and setting priorities to correct the identified hazards and potential hazards.

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[3] ''Safety Management Systems: Good Practices for Development and Implementation,'' FHWA and NHTSA, May 1996, may be obtained at the FHWA, Office of Safety, Room 3407, 400 Seventh St., SW., Washington, DC 20590, or electronically at *http://safety.fhwa.dot.gov/media/documents.htm.* It is available for inspection and copying as prescribed at 49 CFR part 7.

(3) A process for communication, coordination, and cooperation among the organizations responsible for the roadway, human, and vehicle safety elements; and

(4) Development and implementation of public information and education activities on safety needs, programs, and countermeasures which affect safety on the FWS transportation systems.

(f) While the SMS applies to appropriate transportation facilities serving the Refuge System funded under the FLHP, the extent of system requirements (e.g., data collection, analyses, and standards) for low volume roads may be tailored to be consistent with the functional classification of the roads. However, sufficient detail should be included for each functional classification to provide adequate information for use in making safety decisions in the RR program.

§ 972.214 Federal lands congestion management system (CMS).

(a) For purposes of this section, congestion means the level at which transportation system performance is no longer acceptable due to traffic interference. For those FWS transportation systems that require a CMS, in both metropolitan and non-metropolitan areas, consideration shall be given to strategies that reduce private automobile travel and improve existing transportation system efficiency. Approaches may include the use of alternate mode studies and implementation plans as components of the CMS. The FWS shall consider the results of the CMS when selecting the implementation of strategies that provide the most efficient and effective use of existing and future transportation facilities, and alleviate congestion.

(b) In addition to the requirements provided in §972.204, the CMS must meet the following requirements:

(1) For portions of the FWS transportation system within TMAs, the FWS transportation planning process shall include a CMS that meets the requirements of this section. By agreement between the TMA and the FWS, the TMA's CMS coverage may include the transportation facilities serving the Refuge System, as appropriate. Through this agreement(s), the FWS may meet the requirements of this section.

(2) If congestion exists at a FWS facility within the boundaries of a TMA, and the TMA's CMS does not provide coverage of the portions of the FWS transportation facilities experiencing congestion, the FWS shall develop a separate CMS to cover those facilities.

(3) For portions of the FWS transportation system outside the boundaries of TMAs, the FWS shall:

(i) Develop criteria to determine when a CMS is to be implemented for a specific transportation system; and

(ii) Have CMS coverage for all transportation facilities serving the Refuge System, as appropriate, funded through the FLHP that meet minimum CMS needs criteria.

(4) A CMS will:

(i) Identify and document measures for congestion (e.g., level of service);

(ii) Identify the causes of congestion;

(iii) Include processes for evaluating the cost and effectiveness of alternative strategies to manage congestion;

(iv) Identify the anticipated benefits of appropriate alternative traditional and nontraditional congestion management strategies;

(v) Determine methods to monitor and evaluate the performance of the multi-modal transportation system;

(vi) Appropriately consider the following example categories of strategies, or combinations of strategies for each area:

(A) Transportation demand management measures;

(B) Traffic operational improvements;

(C) Public transportation improvements;

(D) ITS technologies;

(E) Additional system capacity; and

(vii) Provide information supporting the implementation of actions.